



Attorney's Docket No. PP16022.004 (35784/240411)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Wolfe *et al.* Confirmation No.: 2430
Appl. No.: 10/035,420 Group Art Unit: 1644
Filed: October 25, 2001 Examiner: Not yet assigned
For: METHODS OF PROTEIN PURIFICATION AND RECOVERY

Commissioner for Patents
Washington, DC 20231

**INFORMATION DISCLOSURE STATEMENT
CITATION UNDER 37 C.F.R. § 1.97**

Sir:

Attached is a list of documents on form PTO-1449 together with a copy of each identified document. It is requested that the Examiner consider these documents and officially make them of record in accordance with the provisions of 37 C.F.R. § 1.97 and Section 609 of the MPEP. By submitting the listed documents, Applicant in no way makes any admission as to the prior art status of the listed documents, but is instead submitting the listed documents for the sake of full disclosure.

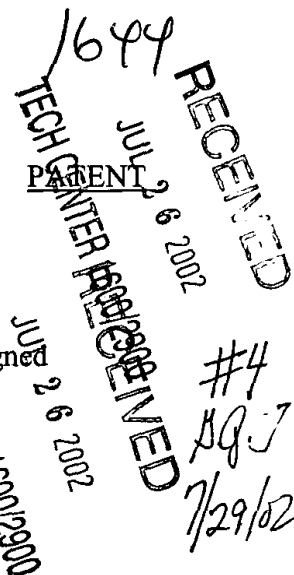
Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner For Patents, Washington, DC 20231, on July 18, 2002.

Lynda Jo Pixley

Substitute for form 1449A/PTO
(Revised 10/2001)

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number 10/035,420
Filing Date October 25, 2001
First Named Inventor Wolfe
Group Art Unit 1644
Examiner Name Not yet assigned
Attorney Docket Number PP16022.004 (35784/2404190)

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U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear
	1	US-4,462,940	07-31-1984	Hanisch <i>et al.</i>	
	2	US-4,816,440	03-28-1989	Thomson, J.W.	
	3	US-4,894,330	01-16-1990	Hersheson <i>et al.</i>	
	4	US-4,931,543	06-05-1990	Halenbeck <i>et al.</i>	
	5	US-4,992,271	02-12-1991	Fernandes <i>et al.</i>	
	6	US-5,162,507	11-10-1992	Wolfe <i>et al.</i>	
	7	US-5,643,566	07-01-1997	Hanisch <i>et al.</i>	
	8	US-5,702,699	12-30-1997	Hanisch <i>et al.</i>	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document Country Code - Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	9	WO 95/31479	11-23-1995	Inhale Therapeutic Systems, Inc.		
	10	EP 0 217 645 B1	04-08-1987	Cetus Corporation		
	11	EP 0 270 799 B1	06-15-1988	Cetus Oncology Corporation		

Examiner
Signature

Date
Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449B/PTO
(Revised 10/2001)

Complete if Known

Application Number	10/035,420
Filing Date	October 25, 2001
First Named Inventor	Wolfe
Group Art Unit	1644
Examiner Name	Not yet assigned
Attorney Docket Number	PP16022.004 (35784/240451)

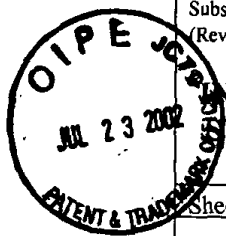
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 3

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	12	AHN, J., <i>et al.</i> , "Investigation of Refolding Condition for Pseudomonas Fluorescens Lipase by Response Surface Methodology," <i>J. Biotechnol.</i> , 1997, pp. 151-160, Vol. 54(3).	✓
	13	BAM, N., <i>et al.</i> , "Molten Globule Intermediate of Recombinant Human Growth Hormone: Stabilization with Surfactants," <i>Biotechnol. Prog.</i> , 1996, pp. 801-809, Vol. 12(6).	✓
	14	CARPENTER, J., and J.H. CROWE, "The Mechanism of Cryoprotection of Proteins by Solutes," <i>Cryobiology</i> , 1988, pp. 244-255, Vol. 25(3).	✓
	15	CHARMAN, S., <i>et al.</i> , "Techniques for Assessing the Effects of Pharmaceutical Excipients on the Aggregation of Porcine Growth Hormone," <i>Pharm. Res.</i> , 1993, pp. 954-962, Vol. 10(7).	✓
	16	CLELAND, J., <i>et al.</i> , "Polyethylene Glycol Enhanced Protein Refolding," <i>Biotechnology</i> , 1992, pp. 1013-1019, Vol. 10(9).	✓
	17	DAUGHERTY, D., <i>et al.</i> , "Artificial Chaperone-Assisted Refolding of Citrate Synthase," <i>J. Biol. Chem.</i> , 1998, pp. 33961-33971, Vol. 273(51).	✓
	18	DRYDEN, D., and M.P. WEIR, "Evidence for an Acid-Induced Molten-Globule State in Interleukin-2; A Fluorescence and Circular Dichroism Study," <i>Biochim. Biophys. Acta</i> , 1991, pp. 94-100, Vol. 1078(1).	✓
	19	EDY, V., <i>et al.</i> , "Stabilisation of Mouse and Human Interferons by Acid pH Against Inactivation Due to Shaking and Guanidine Hydrochloride," <i>Proc. Soc. Exp. Biol. Med.</i> , 1974, pp. 249-253, Vol. 146(1).	✓
	20	EDY, V., <i>et al.</i> , "Stable and Unstable Forms of Human Fibroblast Interferon," <i>Infect. Immun.</i> , 1977, pp. 445-448, Vol. 16(2).	✓
	21	GAUTHIER, M., and P. A. PATSTON, "Reactivation of C1-Inhibitor Polymers by Denaturation and Gel-Filtration Chromatography," <i>Anal. Biochem.</i> , 1997, pp. 228-233, Vol. 248(2).	✓
	22	HOURY, W., <i>et al.</i> , "The Nature of the Initial Step in the Conformational Folding of Disulphide-Intact Ribonuclease A," <i>Nat. Struct. Biol.</i> , 1995, pp. 495-503, Vol. 2(6).	✓
	23	JARIWALLA, R., <i>et al.</i> , "The Reactivation of Human Interferons by Guanidine Thiocyanate," <i>Experientia</i> , 1980, pp. 1390-1391, Vol. 36(12).	✓
	24	KENDRICK, B., <i>et al.</i> , "Quantitation of the Area of Overlap Between Second-Derivative Amide I Infrared Spectra to Determine the Structural Similarity of a Protein in Different States," <i>J. Pharm. Sci.</i> , 1996, pp. 155-158, Vol. 85(2).	✓
	25	MUZAMMIL, S., <i>et al.</i> , "Molten Globule-Like State of Human Serum Albumin at Low pH," <i>Eur. J. Biochem.</i> , 1999, pp. 26-32, Vol. 266(1).	✓



Substitute for form 1449B/PTO (Revised 10/2001)		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) Sheet 3 of 3		Application Number	10/035,420
		Filing Date	October 25, 2001
		First Named Inventor	Wolfe
		Group Art Unit	1644
		Examiner Name	Not yet assigned
		Attorney Docket Number	PP16022.004 (35784/240411)
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
26	ROZEMA, D., and S. H. GELLMAN, "Artificial Chaperone-Assisted Refolding of Denatured-Reduced Lysozyme: Modulation of the Competition Between Renaturation and Aggregation," <i>Biochemistry</i> , 1996, pp. 15760-15771, Vol. 35(49).		.
27	ROZEMA, D., and S. H. GELLMAN, "Artificial Chaperone-Assisted Refolding of Carbonic Anhydrase B," <i>J. Biol. Chem.</i> , 1996, pp. 3478-3487, Vol. 271(7).		.
28	TODHUNTER, R., <i>et al.</i> , "Structure of Equine Type I and Type II Collagens," <i>Am. J. Vet. Res.</i> , 1994, pp. 425-431, Vol. 55(3).		.
29	WEIR, M., <i>et al.</i> , "Micropreparative Purification of Recombinant Human Interleukin-2," <i>J. Chromatogr.</i> , 1987, pp. 209-215, Vol. 396.		.
30	XIE, Y. and D. B. WETLAUFER, "Control of Aggregation in Protein Refolding: The Temperature-Leap Tactic," <i>Protein Sci.</i> , 1996, pp. 517-523, Vol. 5(3).		.

Examiner Signature		Date Considered	
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